

# ‘Slippage’ in the Implementation of Forest Policy by Local Officials: A Case Study of a Protected Area Management in Lao PDR

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**Abstract** A progressive part of protected area management program in Lao PDR is a land and forest allocation program which contains critical elements that delegate right of land and forest use to local people. This study analyzes the gap between the original intent of the program and its actual implementation by local officials in Phou Xang He protected area, and discusses policy issues that need to be addressed. It appears that several types of non-compliance with regulations by local people have occurred, with local officials tacitly ignoring infractions. By switching view-points, however, it appears that the local officials permit these infractions as a way of allowing local people to secure their livelihoods. As constraints on the realities of land and forest use vary widely in and around villages in different locales, there is a need for government to allow local officials flexibility in implementing policies.

**Keywords** Land and forest allocation program · Infractions · Toleration · Conflict prevention

## Introduction

The establishment of officially protected areas is considered an effective way to conserve biodiversity in the form of varied ecosystems and unique animals and plants (MacKinnon et al. 1986; Daniel and Thomas 2000). However, local communities often depend on these protected forests and their rich ecosystems as well as the land surrounding them for their livelihoods. Establishing protected areas often ends up excluding the local people, with access to these areas and their resources partly or totally denied by the government and their authorities. Such

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negative impacts have been recognized in various parts of the world (e.g. Wells and Brandon 1992; Marrie 2004), even causing major conflicts in extreme cases. Especially in developing countries, where there is an overriding urgency to prevent the further depletion of forests, increasingly more forest land is being set aside for protection. Globally, while there was only 410 M ha of protected land area as of 1972, this area has increased to 1,710 M ha or about 11.5% of total land area as of 2003 (IUCN 2003). Rich forest areas which were residential areas for local people, and had provided secure livelihoods for them, have been enclosed as protected areas by governments. In that the integrity of these areas most often depends on the cooperation of local communities, it is now clear that the negative impacts on local people of establishing protected areas should be mitigated.

In recent years increasingly more policies and projects in developing countries have begun to take due account of the role and importance of local people in the sustainable management of forest resources (Westby 1989; Fisher 1999; Inoue 2000; Mannigel 2008). About 25% of forest area in developing countries is owned or managed by rural communities under long-term contractual agreements. Community management has doubled in the last 20 years and could reach 40% by 2050 (Scheyvens 2008). This has led to the wide acceptance of traditional resource-use practices of local people in developing countries as a model of cooperative management (Fisher 1995). In the background of national governments around the world coming to embrace the concept of collaborative forest resource management is a shared recognition that, in reality, because of limited budgets and human resources, it is *not possible* to manage all forest areas in individual countries *without* the cooperation of local people. At the same time, international organizations and foreign aid agencies have been actively promoting such notions as ‘social forestry’, ‘community forestry’ and ‘community based forest management’ with emphasis on the participation of local people, which in turn has encouraged national governments to develop participatory forest management policies (Sato 2002).

Though local people have gained the right of forest use officially, there are many cases where that allocated right is still not sufficient (Marrie 2004). Local people may easily be excluded from the areas for conservation for precious animals and plants, particularly protected areas. While a hard line is taken to enforce the forest-related legal system, local people may lose their right to livelihoods and there may be conflict between local people and government (Wells and Brandon 1992; Grazia et al. 2004).

Eighteen protected areas in Laos—called ‘*paa sagwan hensaat*’—were established in 1993 by PM Order No. 164—Regarding the Establishment of Protected Areas by the national government. Currently, 20 protected areas make up 3.3 M ha, or 14% of Lao PDR’s total area (LSFP 2001). Most of the land set aside as protected areas has mountainous or hilly terrain, where a relatively large proportion of ethnic minorities live, with mostly inadequate access to administrative and other public services (Government of Lao PDR 2003). People living in these areas are most likely to be both socially and economically disadvantaged, and thus forest resources—especially non-timber forest products (NTFPs)—play an important role in securing their livelihoods (SUAN Regional Secretariat 1991; Jodie 1994). These protected areas and the land around them encompass 1,102 rural villages or 10% of

all villages in Lao PDR, and it is expected that designating protected areas will continue to be a factor in conflicts between local people and the government over the use of land (Berkmuller et al. 1993).

The land and forest allocation program has been underway since 1996 with the aim of transferring forest management rights and responsibilities to local people of rural villages (Kitamura 2003). The government and aid organizations—particularly foreign aid organizations—promoted this program for securing local livelihoods and conserving biological diversity under the program of forest management in protected areas (Southammakoth et al. 2001). This program has been carried out in more than 70% of the villages in Lao PDR according to DOF (2007), but in reality it has not been implemented substantially since 2000 due to lack of budget and manpower (FSIP 2007). The government recognized that this situation has to be reviewed and improved (Government of Lao PDR 2003). In the Forestry Strategies 2020 that sets out long-term forest management by the government, the review of the land and forest allocation program has high priority (MAF 2005).

In these circumstances, examining the obstacles to protected area management policy under the land and forest allocation program can provide valuable lessons for new policy instruments by the government. Therefore, the objective of this study is to identify the obstacles of implementation of protected area management policies by the land and forest allocation program as well as examine the impact on securing livelihoods of local people through the success of the program. In order to explore this issue, two villages bordering a protected area in Savannakhet Province where the land and forest allocation program has already been conducted were selected for research. In this paper, the concept of the program is first discussed, and then the operational divergence between different administrative levels of implementation is examined by observing the reality of policy implementation by local officials (at provincial and district levels) to identify problems that need to be resolved.

## The Land and Forest Allocation Program in Lao PDR

Lao PDR had its first National Conference on Forests in 1989, held against the background of shrinking forests and a deteriorating environment. Among the recommendations stemming from the conference was one on the transfer of the rights and responsibilities of forest resource management to local people, along with other several measures to be carried out for conserving the country's forests. In 1996 the legal system to govern these transfers was established by orders issued by the prime minister (PM) and MAF, which were then put into full-scale operation (Inoue and Hyakumura 2000).

The government's goal is to eventually conduct the land and forest allocation program (*Mop Din Mop Pa*),—mainly through MAF and its subsidiary organizations—in all villages in Lao PDR. The land and forest allocation program in protected areas has the primary objective of more efficient management in order to protect biodiversity values. At the same time, it recognizes the development needs of both the nation as a whole and local people who are dependent on the natural resource base for their livelihoods.

Major steps to be conducted in each village with the participation of local people, include<sup>1</sup>:

1. defining the boundaries of each village after consultation with neighbouring villages.
2. classifying land within the boundaries into land and forest use categories based on the current land and forest use pattern, and create a map.
3. defining regulations governing land and forest use for each classification of land.
4. allocating land to those who do not have enough land for cultivation.

The land and forest allocation program is to be carried out in such a way that the customary rights of local people to use land and forest resources are duly respected (Oya 1998; Khouangvichit et al. 2002). According to the MAF orders, any land where permanent production activities are conducted (i.e. all fields of rice and other crops, as well as residential areas) is to be registered to those who use the land, while other land (i.e. areas of swidden agriculture, fallow land and degraded land) is to be allocated to households for the cultivation of agricultural products and planting of trees.<sup>2</sup> This is expected to transfer to local people, among other rights, the right to use and manage forest resources (*Forest Law*, Article 63; MAF Order No. 535, Article 11). Compared to other nations in Southeast Asia, this legal environment is creditable in the sense that it duly recognizes the rights of local people, aside from the reality of implementation (Inoue 2000). Even so, the government of Lao PDR places great importance on the program (Anon 2001a), and a number of international organizations have provided technical and financial assistance.

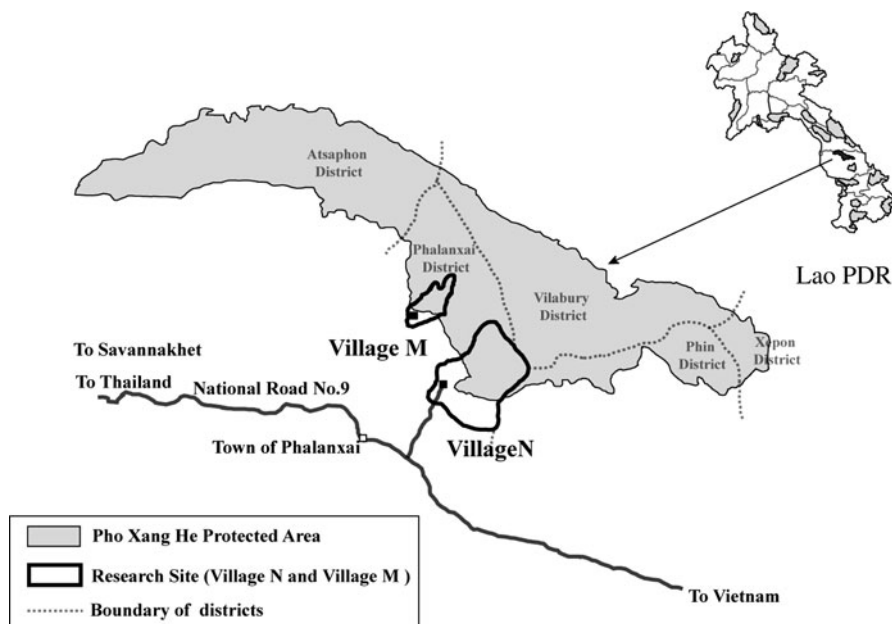
Originally, the government of Lao PDR announced that the program would be completed by year 2005. Accordingly, MAF set policies to eliminate swidden agriculture in most provinces by 2005, including Savannakhet, and to eradicate the practice completely by 2010 (MAF 2001). But due to budget constraints and lack of manpower, the government did not continue implementing the program after 2000 (FSIP 2007).

## The Study Area

The province of Savannakhet is located in the southern part of Lao PDR and has a population of 812,512 in a total land area of 2.17 M ha. (DPI Savannakhet Province 2005). The Savannakhet Plain in the province's western part is the largest lowland area in the country, covering 600,000 ha, which encompasses the largest grain belt in Lao PDR (*ibid*). The topography of the eastern part of the province is

<sup>1</sup> According to MAF Instruction No. 822, Article 2, the program is comprised of eight steps: 1. Preparation; 2. Consultation with village; 3. Actual data collection; 4. Open discussion meetings for the whole village; 5. Actual field measurement; 6. Conclusion; 7. Extension; and 8. Monitoring and evaluation.

<sup>2</sup> The orders of MAF also require spare land to be secured for possible increase in the population in the future.



**Fig. 1** Savannakhet Province and the two research sites

characterized by small hills and mountains that define the country's border with Vietnam. The province is endowed with diverse forest resources, and the Phou Xang He Mountains, located around the centre of the province, as well as the Dong Phou Vieng Mountains in the southeast, were designated as protected area by the national government in 1993 (Fig. 1).

Two villages in Phalanxai District in Savannakhet province were selected as research sites. Both Village N and Village M<sup>3</sup> are located in the foothills of the Phou Xang He Mountains, and both went through the process of the land and forest allocation program. The Phou Xang He protected area overlaps the upper hilly areas of these villages, making both suitable for identifying impact both within and outside protected areas by local people through this study. The forest condition of these villages can be classified into mainly three types, namely dense forest, secondary forest or fallow land, and dry dipterocarp forest. The upper hilly area is covered by dense forest and the lower hilly area by dense forest and some secondary forest. Flat land is covered by mainly dry dipterocarp forest. Local people collect NTFPs in any type of forest.

Village N, the history of which is believed to go back more than 100 years, lies in the north-eastern part of the district and has a population of 781 living in 130 households. The village is located off the main road, and can be only reached through unpaved road, and lacks basic infrastructure such as utilities, water supply and telephone service. The villagers are animists and belong to the *Bru* tribe,

<sup>3</sup> These codes are used to preserve confidentiality with respect to the villages.

speaking a dialect of the *Mon-Khmer* language. They are mainly engaged in paddy and swidden cultivation but also depend on NTFPs for their livelihoods.

Village M lies in northern Phalanxai District, and also lacks basic infrastructure. The village is also located off the main road, and vehicle access is difficult in the rainy season. The village has a population of 253 in 52 households, also belonging to the *Bru* tribe. Before the program was implemented, 40 households (76.9% of all households) produced rice, while 36 (69.2%) practiced swidden agriculture.

## Research Method

Nine field studies were conducted in Lao PDR from 1999 to 2004. Three interview surveys were conducted in the capital city of Vientiane with spokespersons for forest allocation policy and protected area management policy in the Department of Forestry (DOF) and land and forest allocation policy in the National Agriculture and Forestry Extension Service (NAFES) under the Ministry of Agriculture and Forestry (MAF). Also, three interviews were conducted at the provincial level with the land and forest allocation committee under Savannakhet administrative office and the Provincial Agricultural and Forestry Office (PAFO) (subordinate to MAF) in the province of Savannakhet, and with the District Agriculture and Forestry Office (DAFO) in Phalanxai District. In addition, several semi-structured and informal interviews were conducted with about 10 key persons including village heads and subs-heads, tribal elders, village forest volunteers and other influential people in the two selected villages to obtain their views about the livelihood situations of the villages, protected area management and land and the forest allocation program. Thirty households were selected for personal interviews out of 118 households in Village N using the wealth ranking method<sup>4</sup> (described by Grandin 1988)<sup>5</sup> Materials related to protected area management and land and forest allocation policies were collected at the time of these interviews. In addition, field observations at both villages were made on the forest areas inside and outside of protected areas and the land use area including paddy fields, swidden agriculture areas and fallow land in both villages.

## Results and Discussion

### Classification of Households in Village N

In Village N, the author identified three wealthy categories on the basis of rice self from discussion with key persons. 11 households (9.3%) can be classified as a wealthy, 42(35.6%) as a normal and 65(55.1%) as a poor. Thirty households were selected out of 118 households in Village N in the similar ratio of population for household interview (Table 1).

<sup>4</sup> One household was excluded because the change occurred after the program was conducted.

<sup>5</sup> The wealth ranking method is a simple field research technique used to classify each household on the basis of their relative wealth or economic status, by the community itself.

**Table 1** The economic level classification of households in Village N

Economic level	All household	Selected household
Wealthy	11 (9.3%)	3 (10.0%)
Normal	42 (35.6%)	10 (33.3%)
Poor	65 (55.1%)	17 (56.7%)
Total	118	30

### Implementation of the Land and Forest Allocation Program in the Study Sites

The land and forest allocation program has been implemented on a trial basis in Savannakhet since the outset of the program in 1996, with support from the Lao-Swedish Forestry Program (LSFP) and the Forest Management and Conservation Project (FOMACOP), which was funded jointly by the World Bank, a Finnish development agency (FINNIDA), and the Global Environment Facility. By year 2000, the program had been implemented in 171 out of 1,541 villages in the province. In 2001, however, the major aid agencies withdrew from the program, and the provincial government authority and PAFO were left solely responsible for its implementation. This responsibility was mostly shouldered by local officials who have limited human and financial resources available. Since then local officials carried out the program using their own budgets, and limited progress was made with the program. As of 2003, about 30% of villages in the province had completed the program (NSC 2004) and currently the program has not yet been completed.

At the provincial level, PAFOs—which control the operation of DAFOs—are responsible for implementation of the program, whereas district authorities and DAFOs implement it (and have the control) at the district level. Each DAFO develops an implementation plan for every fiscal year, based on which district offices and local people are jointly implementing the program. Other departments that participate include district administrative offices and district tax offices that govern the collection of property taxes and the issuance of land titles. A PAFO, on the other hand, determines the overall policy for the whole province, submits budget requests to the provincial authority for the program as well as for the provincial agricultural sector, and distributes the funds to the DAFOs. Each DAFO could carry out this program with limitation of budget from PAFO. In the district of Phalanxai, for example, the program is implemented in each village for a period of between 2.5 and 4.7 days (Table 2).

**Table 2** Management situation of the land and forest allocation program in Phalanxai District (FY2000–2002)

Fiscal year	Total budget (Lao kip) <sup>a</sup>	Number of villages where program conducted	Total days spent	Days spent per village	Budget per village (Lao kip)
2000	13,040,000	11	46	4.2	1,185,455
2001	3,876,400	6	15	2.5	646,067
2002	3,000,000	3	14	4.7	1,000,000

<sup>a</sup> The exchange rate during financial years 2000 to was US\$1 = 7,255–7,600 Lao kip

In Village N, the land and forest allocation program was carried out from January 29 to February 14, 1998 by the DAFO with technical and financial assistance from the LSFP. Land for cultivation was allocated to 51 households (43.2% of all households) that made a land request. After implementation of the program, the number of households practicing swidden agriculture dropped from 107 (90.7% of all households) to 63 (53.4%). Land classified as protected area accounted for 56.5% of the village's total area after the program was conducted.

In village M, the program was implemented by the Phalanxai DAFO from April 5 to 20, 2000. The LSFP provided financial assistance only. No land for cultivation was allocated to households, although the village's land and forest were classified into use categories. After the program was implemented, more than half the households that had previously conducted swidden agriculture ceased the practice. As a result of the program, the Phou Xang He Protected Area now covers more than half the village's land area.

### Land and Forest Allocation Program Divergence Between Concepts and Implementation

A gap can be observed between the concept of policies and their actual implementation, in various respects as discussed below.

#### Notification Process from Government to Village

Villagers had not received any information about the protected area it was established in 1993. In 1996, when the LSFP commenced, the budget for the protected area was completely allocated to the PAFO of Savannakhet Province. Subsequently this budget was allocated to each DAFO in the concerned districts, along with official notification on the protected area management. However, it was not until 1998 that most of local people in Village N and village M became aware of the protected area. It was only when the land and forest allocation program was implemented that the local people in Village N and village M became aware of the existence of the protected area. Under the program, the land and forest use of the villages were supposed to be discussed among local people and local officials, so efforts were made for local notification of the protected area.

#### Recognition of the Protected Area and Regulation of the Use of Resources

During implementation of the program, DAFO officials explained the existence of the Phou Xang He protected area to the local people as well as the need to regulate the use of resources in it (i.e. prohibition on harvesting timber and NTFPs, and of use of land for cultivation). Villages that overlap the protected area designated by the national government (including Village N and M) were instructed by DAFO officials to consider those areas as their own 'conservation forest.' The program provided an opportunity to publicize the existence of the protected area to the local people. This does not necessarily mean, however, that they understood the rules and regulations governing it. While local people knew that activities are restricted in



these areas, that is all they understood; in other words, as the author heard some local people say, 'There is a protected area way up in that mountain and various production activities are prohibited there.' Because local people did not clearly understand the regulation, some of them may have continued agricultural activities inside the protected areas.

According to DAFO officials, those who harvest timber in protected areas are punished as soon as it is reported. They also claim that cultivation in protected areas is prohibited. According to field observation, this prohibition was not enforced strictly. On a visit with DAFO officials to the protected area within the boundaries of Village N, the author came across a swidden agriculture field. One local official offered no criticism of the practice and explained why the family was cultivating the field. He said, 'They have long been engaged in swidden agriculture in this area, having no working males or land for settled cultivation. They believe that there is little harm in their doing that, with their field being so small,' giving tacit approval to the act.<sup>6</sup> And local officials do not punish local people that harvest NTFPs. In other words, the DAFO officials do not penalize those activities on which the livelihoods of local people depend, even when they occur inside the protected area.

### Toleration of Swidden Agriculture

During implementation of the program, DAFO officials instructed the local people to abandon the practice of swidden agriculture in all areas, not just in the protected area. At the time that the forests in the research sites were classified, local people were asked whether they still engaged in the practice. As compensation for abandoning the practice of swidden agriculture, the program was supposed to result in the allocation of land to households that did not have enough for cultivation. However, this did not take place in most villages for a number of reasons. Nevertheless, in both Village N and M the author came across cases where local people had cleared land for cultivation. Those who had previously practiced swidden agriculture in flat areas reclaimed the same land for rice paddy cultivation. At the same time, those who had practiced swidden agriculture on hillside land had opened up new land in unoccupied flat areas, also for the production of rice. As a result, the total area of land under swidden cultivation sharply decreased in both villages. According to Table 3, 14 households (48.3%) decreased the area of swidden land after the program.

According to survey respondents, the reasons for reduced swidden agriculture are the pressure on following the government policy of promoting rice paddy cultivation and the view of local people that paddy cultivation is a superior agricultural practice to swidden agriculture.

Notably, the increase in paddy cultivation did not lead to the total abandonment of swidden agriculture. According to field observations, the practice is still rampant outside the protected area. When the author came across a swidden field in another instance, one of the accompanying local officials said, 'They call these fields *suan*

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<sup>6</sup> Swidden agriculture within protected areas is prohibited by MAF Order No. 524; however, the utilization of land for cultivation within buffer zones is allowed.

**Table 3** Changes in land use after the land and forest allocation program to household

Type of land-use change	Frequency and relative frequency of households	Existence of change	Number and percent of households
Swidden land to swidden land	1 (3.6%)	No	10 (34.5%)
Paddy field to paddy field	2 (7.1%)		
Swidden land to swidden land	7 (25.0%)		
Paddy field → paddy field		Yes	19 (65.5%)
Swidden land to paddy field and swidden land	6 (21.4%)		
Paddy field to paddy field	2 (7.1%)		
Swidden land to paddy field			
Paddy field to paddy field	6 (21.4%)		
Swidden land to paddy field and swidden land			
Paddy field to paddy field	3 (10.7%)		
Occupied land to paddy field and occupied land <sup>a</sup>			
Paddy field to paddy field	1 (3.6%)		
Occupied land to paddy field			
Occupied land to paddy field and occupied land	1 (3.6%)		

<sup>a</sup> Occupied land refers to land where there is presently no productive activity taking place but the land will be cultivated in the future

[their garden],’ and showed little intention of taking measures to stop the practice. Of course, the local officials think that swidden agriculture in protected areas and dense forest should be prohibited. But the act of conducting swidden agriculture in secondary forest, the most typical practice in the region, is tacitly approved of by the local officials.

### Forest Classification and Regulation of Use

DAFOs classify forests included in the program of land and forest allocation on the basis of forest classification in Lao PDR *Forest Law*. According to interviews with local people in the two research sites, forests have been traditionally classified by local people based on natural conditions (i.e. areas of swidden agriculture land, fallow or secondary forest, dense forest or dry dipterocarp forest). They have also been classified in terms of religious beliefs (i.e. ‘spiritual’ forest and ‘cemetery’ forest), both representing a close connection between the forest and the people, as indicated in Table 4. After implementation of the program, all forest areas were classified into the categories of Table 5, re-defined for administrative purposes (according to Forest Law, Article 16) (Hyakumura and Khotpathoum 2003).

How conservation forest is understood by local people and by the program differs considerably. In the local people’s perception, spiritual forest is recognized as a conservation forest in which any productive activities are prohibited. On the other hand, the conservation forest defined by the program compromises the protected areas declared by the national government. Tables 4 and 5 reveal that the official

**Table 4** Traditional forest classifications in Village N

Traditional category	In the Bru language	In the Lao language
Swidden land	Sharai ja pong (first year) Sharai kuay (second year) Sharai kuuy (third year)	Din hai
Fallow land (early stage)	Arui nyom	Paa lao oon
Fallow land (secondary forest)	Arui (dense) Paatensao (sparse)	Paa lao Paa lao kae
Dense forest	Gharung	Paa dong
Dry dipterocarp forest	Ghok	Paa khok
Spiritual forest	Gharung gian / Gharung put	Paa mahesak
Cemetery forest	Ping kamui	Paa saa
Paddy field	Kute nia	Din naa
Garden	Kute suan	Din suan
Residential land	Kute wil	Din baan

**Table 5** Forest classification in Village N by the land and forest allocation program

Category	Lao language
Conservation forest	Paa saguan
Protection forest	Paa ponkan
Production forest	Paa pharit
Degraded forest	Paa hunhuu
Utilization forest	Paa namsai
Cemetery forest	Paa saa
Spiritual forest	Paa mahesak
Paddy field	Din naa
Residential land	Din baan

conservation forest category is not equivalent with what local people call spiritual forest. Therefore, there seems to be a large gap in perception between local people and the government. The new classifications by the program will not be recognized by local people unless they come to understand the overall idea behind them, including the objective of reclassifying forest land as well as the related regulations on forest use. When asked if they understood the intended use of areas categorized as conservation forest and protection forest, the majority said, ‘No logging is allowed in those areas’, but they did not have any further information.

Under the official land and forest allocation program, a land and forest use map is supposed to be created for each village, taking due account of the preferences of the local people in the occasion of village meeting with local officials. DAFO officials are expected to walk along the boundary with local people of the concerned villages and fit the boundary on the map. However, because the program took place in most villages over only a few days, there was not enough time to walk through the villages for a detailed survey. DAFO officials had to familiarize the situation of land

and forest use by having interviews with just a few local elite groups, and frequently avoided obtaining information from local people who have little power in the village and rely on forest products. Whereas the areas of spiritual forest and cemetery forest are still included on the map, as requested by the local people, traditional land-use patterns included in the old classifications, including dense forest or secondary forest, will have to be replaced. DAFO officials know about the five categories of classification based on the *Forest Law*, but they are not necessarily given enough information to conduct correctly the proper designations. Consequently, reclassification is conducted within the limits of their understanding. Because no additional funding is earmarked for follow-up programs, DAFO cannot mobilize personnel to perform the evaluation and follow-up of the land and forest use in each village. Therefore, the only information about the land and forest classifications to which local people have access is the land and forest use map displayed on the village bulletin board, plus a letter of agreement made between DAFO and the village on land and forest use. Over time, local people will forget about the land and forest classifications conducted by the program.

### Defining Village Boundaries

On the plains and lower hilly areas, overlapping or shared interests between neighbouring villages over NTFPs or land for cultivation are common. The distance in a straight line between Village N and the closest village is only 1 km, and the closest one to Village M is only 2.5 km away. With forest areas being close to residential areas, there are already traditional boundaries defining the village areas, which include forests endowed with various natural resources, as well as land for paddy cultivation or other productive activities. The forest and land allocation program has provided an opportunity for neighbouring villages to work together to confirm or agree on the traditional boundaries, which in turn has promoted the overall defining of village boundaries.

Upper hilly areas remote from the residential areas of both villages almost all lie within the protected area. The distance from Village N to the uppermost part of the hills is 20 km, while that for Village M is 18 km. Because these are far from areas of residence, there is no cultivation and no frequent harvesting of NTFPs, so villagers have little interest in them. Therefore, there were no traditional boundaries in the upper protected areas and village boundaries for these areas were established at the initiative of DAFO during implementation of the program. Interviews with local people, however, revealed that they seldom concern themselves with the fact that there are village boundaries when collecting NTFPs within the protected area.

### Allocation of Land for Cultivation to Individual Households

Interviews with officials of the DAFO and the PAFO revealed that, while the land and forest allocation program succeeded in defining village boundaries and in classifying land and forest in each village, the allocation of land for cultivation to individual households did not take place in the majority of villages, except in those where the LSFP had provided support for implementation of the program.

At the present time, the average period of implementation in each village ranges from 2 to 5 days. The program has a long list of objectives that cannot be achieved fully in such a short time, and therefore it is often the case that the allocation of land to individuals is left unaccomplished. DAFO officials argue that this is because there are not sufficient funds available for the program. The total average cost of the program per village is 650,000 Lao kip (about US\$87), and the majority is spent on essential activities including personnel costs and fuel for transportation of DAFO staff, which limits the scope for extending the implementation period (Table 6).

Would it be possible to allocate land for cultivation to individual households as planned, if the program budget was increased? In Village N, where the LSFP provided both technical and financial assistance, the program was implemented over a period of 2 weeks, and land for cultivation was allocated to individual households. In Village M, on the other hand, where the LSFP provided only financial assistance, no land was allocated to local people for cultivation, even though the program was implemented for the same period of 2 weeks. What this implies is that land allocation cannot take place as planned without a favourable institutional and technical environment, even with the provision of sufficient funds and time.

In Savannakhet Province, all DAFOs use a manual developed by the LSFP especially for the program (NOFIP 1997), which consists of more than 100 pages and includes a detailed illustration of procedures. The LSFP believed that the program could be successfully implemented if the provisions of the manual are followed. Following this manual requires a high level of technology, however,

**Table 6** Funds and expenditures for the land and forest allocation program in Phalanxai District (FY2001)

Cost category	Item	Total number of persons	Number of days	Unit (Lao kip)	Total
Personnel	DAFO staff	13	15	10,000	1,950,000
	Villagers	54	2	10,000	1,080,000
	Item	Number	Quantity (litre)	Unit (Lao kip)	Total
Fuel	Gasoline for car	1	60	3,000	180,000
	Gasoline for motorbike	8	10	3,500	280,000
	Engine oil for motorbike	8	1	17,000	136,000
	Other oil for motorbike	8	1	17,000	136,000
Material	Bulletin board for map		10	10,000	100,000
	Maker		1	10,000	10,000
	Pen		1	4,400	4,400
Total cost					3,876,400
Average cost of the program per village					646,067

such as the costly surveying tools and aerial photos used to identify land to be allocated for cultivation purposes. The program was implemented as such in Village N with not only financial but also technical support from the LSFP. Although LSFP provided a week of training to DAFO officials in charge of the program, it was still difficult for them to understand fully the manual in such a short period and thoroughly implement the program. In addition, the DAFO is unable to purchase the necessary equipment with the present budget. Interviews with DAFO officials revealed that the majority of local officials do not think they can afford to comply with all the provisions of the manual. The manual does not take into account the time and funds available to the DAFOs, as well as the implementation capacity of DAFO officials. If this manual is to be used in implementation of the program, then the necessary technical and financial assistance must be provided.

With regard to the implementation of the land and forest allocation program, the central government instructs local officials to implement all steps of the program (Anon 2001b). The central government officials in charge of the program level said, 'As only those who have not yet had agricultural land, there will not be many households that are qualified in each village. A survey of households in target villages will reveal which households do not have enough rice or depend more on swidden agriculture, making it possible for DAFO officials to calculate the area of land required per household. This process can be carried out even with limited budget and limited human resources.'

Officials at the provincial level said they understand that while it is preferable that all the steps of the program are implemented, allocation of land is difficult with existing personnel, budgets and timetables at the district level. If it takes 2 weeks to implement thoroughly the program, as was the case with Village N where land for cultivation was allocated to individual households, the program can only be implemented in 26 villages a year. This calculation is made on the premise that the program is carried out throughout the year without a break. During implementation, 5–10 DAFO officials must help program officers carry out the program, preventing the organization from engaging in other activities. Furthermore, during the rainy season (June to October), access to those villages remote from the main roads deteriorates, hindering smooth implementation of the program. This is why the program timetable described by the local official can happen only in theory, although the plan of the central government was to complete the program by 2005.

If the bulky manual can be simplified, and if the methods with high technical input can be established and sufficient training is provided to those implementing the program, a DAFO may be able to take the lead responsibility for implementation of the program. In reality, the program is being carried out by each DAFO within their technical and institutional limitations.

Although not all households in village M were able to be allocated agricultural land under the limited implementation of the program, this was not detrimental to each household. Household could continue to use agricultural land for traditional purposes, and DAFO tolerated land use for agriculture.

## Conclusion

The land and forest allocation program was to be implemented in all villages in Lao PDR, to promote sustainable forest management by regulating land and forest use. The protection of rich forests was the primary objective, especially in protected areas, to conserve biodiversity. This research reveals that the rules and regulations on land use in protected areas have not sufficiently penetrated to the village level, and that local people have only a vague awareness or understanding of them.

While local officials do implement policies and programs as instructed by the central government, this does not necessarily mean they are provided appropriate training. The central government does not instruct local officials on the background of the establishment of new regulations, for instance, and it would be impractical to urge it to make the instructions more detailed. It is understandable to some extent why they cannot carry out land allocation as planned and why they may face difficulty in appreciating preferences of local people when classifying land and forests. In this situation, a 'non-functioning system' emerges, without robust leadership from the central government to local officials. At the same time, local officials do not have enough capacity under the condition of work overload from the central government as well. This is due to inadequate resources of local people including budget, manpower and knowledge for implementing the government program. Local authorities can only carry out forest conservation activities within their technical, institutional, and financial capacity.<sup>7</sup>

Tightening restrictions on land and forest use rules can have various negative effects on local people, and the forestry officials of DAFO are aware of this. Local officials therefore tolerate people conducting some unauthorized activities related to their livelihoods as a 'slippage' (in the terminology of Daniel 1999), instead of tightening restrictions on their agricultural activities. Some causes of slippage are identified in Table 7, under items 2, 3, 4 and 6. The implementation slippage discussed here does not refer to sluggish implementation efforts but to flexible implementation<sup>8</sup> that takes local conditions into account for securing local people's livelihoods. Notably, this flexibility has helped to prevent conflicts over forest resources in protected areas as well as confrontations between local people and the local authorities.

Even if this slippage continues to occur in the implementation of the policy to promote sustainable forest management, it is not believed that there will be a major decrease in forest within protected areas. The areas of swidden agriculture have also decreased. Neighbouring countries including Thailand and Vietnam have higher population pressures and therefore have very different land and forest use situations. Lao PDR has a population density of only 24 people/km<sup>2</sup>, while that for Savannakhet Province is 37.3 people/km<sup>2</sup> (in 2004), a relatively high population density compared to the rest of the country. Nevertheless, compared to densities of

<sup>7</sup> Even if ideal institutions are established and put into operation, this may widen the gap between the central and local governments.

<sup>8</sup> Flexible implementation did not always have a positive impact on local people in Lao PDR. Dam construction, tree plantation and development programs including timber harvesting caused some loss of rights of local people.

**Table 7** Areas of insufficient implementation of the program by local officials and their impact to local livelihoods

The insufficient implementation	1. Information notification from government to village	2. Recognition of the protected area and regulation of the use of resources	3. Toleration of swidden agriculture	4. Forest classification and regulation of use	5. Defining village boundaries	6. Allocation of land for cultivation to individual households
Factor of insufficient implementation	Non-functioning system	Toleration by local officials Lack of capacity of local officials	Toleration by local officials	Toleration by local officials Lack of capacity of local officials	Lack of capacity of local officials	Toleration by local officials Lack of capacity of local officials
Impact on local people livelihoods	Nothing	Continue to use forest products inside protected area.	Continue to carry out forest or agricultural activities inside protected area	Continue to use their customary land	Nothing	Continue to use their customary land



127 people/km<sup>2</sup> in Thailand and 254 people/km<sup>2</sup> in Vietnam (UNSD 2008), Savannakhet is sparsely populated and has a large area of unoccupied plains with low population pressure. Although northern Lao PDR has an even lower population density, much of the land is steep and not suitable for paddy cultivation. Local people could relatively easily obtain land for cultivation, so few try to cultivate in protected areas. In addition, the majority of local forest users in this area have traditionally utilized forest resources in a sustainable way.

Even if a program implemented under a national policy includes splendid ideas, attempts to implement the program uniformly across the nation might cause problems later at the local level. Therefore it is necessary for local officials to proceed carefully with implementation of the land and forest allocation program, taking into account the conditions and problems peculiar to each village community. Slippage in the implementation of policies in favour of village communities can be an adaptive tool to bridge the gap between idea and practice.<sup>9</sup>

The most realistic solution to improve protected area management in Lao PDR at this stage would be to allow and encourage local authorities to be flexible in the implementation of national policies with central government's toleration by making the most of traditional land and forest use patterns, adjusting to differing interests over forest resources, and promoting sustainable forest management within each competency. However, this measure can only be transitory. In the future, two basic elements of alternative policy implementation are necessary—securing the livelihoods of local people, and enforcement of the program within the capacity of local officials.

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<sup>9</sup> In environmental administration, administrative organizations often diverge from the aim and provisions of a law in implementation (failure to implement laws, laws that are no longer enforced, delayed implementation, neglected violations, compromises made in court.). Farber (1999) referred to this adjustment mechanism as 'slippage.' Administrative organizations could recognise and approve of this slippage as an adaptive management technique.

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